

IN THE ABSTRACT:

Please cancel the current abstract and insert the following new abstract therefor:

-- A classifier for separating coarse particles from a stream of gas and particles discharged from a vertical mill. The classifier includes a generally cylindrical outer casing having a vertical axis and a vertically oriented sidewall disposed on the mill, an inner casing arranged within the outer casing, providing an annular passageway between the inner casing and the sidewall through which the stream of gas and particles flows upwardly, a ring, supported about the axis, including a plurality of circumferentially-spaced static vanes forming angled ports for imparting rotational motion to the stream of gas and particles flowing through the ports for centrifugally separating a first portion of coarse particles, thereby producing a remaining stream of gas and particles, a wheel, supported for rotation about the vertical axis, including a plurality of circumferentially-spaced radially extending blades, and a passageway for guiding the remaining stream of gas and particles inside the wheel for allowing the remaining stream to flow radially outwardly through openings formed between the blocks, so as to accelerate the rotational motion of the remaining stream for separating a second portion of coarse particles, thereby producing a final stream of gas and particles to be discharged from the classifier. The first portion of coarse particles and the second portion of coarse particles are discharged from the classifier through an outlet for separated particles. --